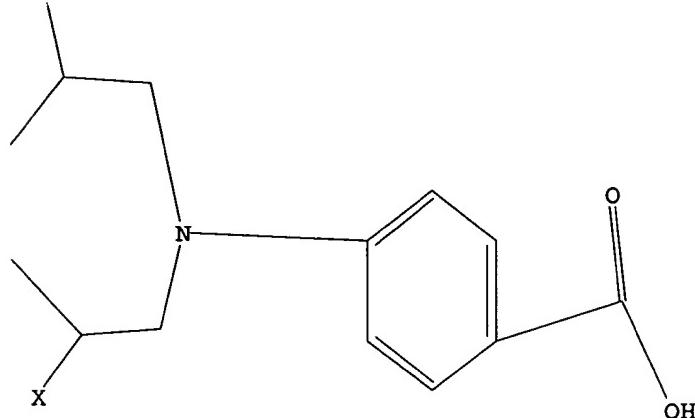


This file contains CAS Registry Numbers for easy and accurate substance identification.

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Uploading C:\STNEXP4\QUERIES\714a.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 19:12:26 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 708 TO ITERATE

100.0% PROCESSED 708 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L2 2 SEA SSS FUL L1

L3 7 L2

=> d 1-7 ibib abs hitstr

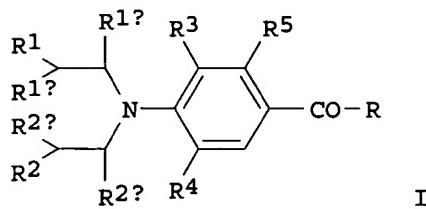
L3 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:707131 CAPLUS
DOCUMENT NUMBER: 133:267154
TITLE: Preparation of nitrogen mustard compounds and prodrugs
INVENTOR(S): Springer, Caroline Joy; Davies, Lawrence Christopher
PATENT ASSIGNEE(S): Cancer Research Campaign Technology Limited, UK
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000058271	A1	20001005	WO 2000-GB1194	20000329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000039746	A5	20001016	AU 2000-39746	20000329
NZ 513759	A	20010928	NZ 2000-513759	20000329
EP 1165493	A1	20020102	EP 2000-918981	20000329
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002540186	T2	20021126	JP 2000-607975	20000329
PRIORITY APPLN. INFO.: GB 1999-7414 A 19990331 WO 2000-GB1194 W 20000329				

OTHER SOURCE(S) : MARPAT 133:267154

GI



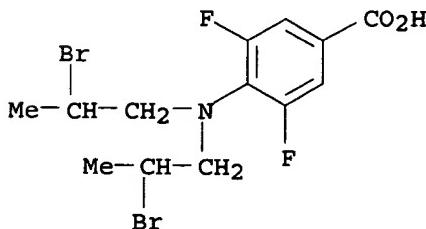
AB Nitrogen mustard compds. and prodrugs I [R = OH or NHCH(Z)CO₂R₇, resp., where R₁, R₂ = Cl, Br, I, OSO₂Me, or OSO₂Ph; R_{1a}, R_{2a}, R_{1b}, R_{2b} = H, C₁₋₄-alkyl or -haloalkyl; R₃ = F, Cl, Br, I, OCHF₂, C.tplbond.CH, OCF₃, Me, CF₃, SF₅, SCF₃, or CF₂CF₃; R₄ = H, any group given for R₃; R₅ = H, F; R₇ = H, Me₃C, allyl; Z = (un)substituted -CH₂-T-W, where T = CH₂, O, S, S(O), or SO₂; W = CO₂H, CONH₂, SO₂NH₂, SO₃H, PO₃H₂, tetrazol-5-yl, heterocyclylthio, etc. (with provisos)] were prepared for use in therapy and treatment, for example, of cancer. Thus, [3,5-difluoro-4-[bis(2-iodoethyl)amino]benzoyl]-L-glutamic acid, prepared via amidation of 3,5-difluoro-4-[bis(2-iodoethyl)amino]benzoic acid with di-tert-butyl-L-glutamate hydrochloride, showed antitumor activity against breast carcinoma in mice at 0.98 mM vs. 2.9 mM for the prior art compound [3-fluoro-4-[bis(2-chloroethyl)amino]benzoyl]-L-glutamic acid.

IT 298211-31-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrogen mustard compds. and prodrugs)

RN 298211-31-1 CAPLUS

CN Benzoic acid, 4-[bis(2-bromopropyl)amino]-3,5-difluoro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

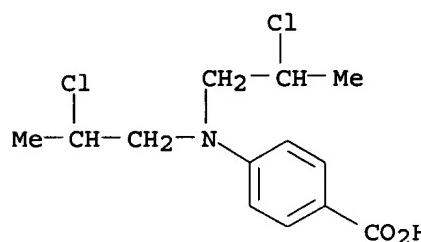
L3 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:167816 CAPLUS
DOCUMENT NUMBER: 90:167816
TITLE: Some physicochemical properties and reactivity of p-[bis(2-chloroalkyl)amino]phenylalkanoic acids
AUTHOR(S): Karpavicius, K.; Juodvirsis, A.; Prasmickiene, G.; Knunyants, I. L.
CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR
SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1979), (1), 51-8
CODEN: IASKA6; ISSN: 0002-3353
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB In p-(ClCH₂CH₂)_nCO₂H (I; R = H, Me; n = 0-3) the cytotoxic amino groups exhibit an appreciable electron-donating effect, whereas the carboxyalkyl groups show a weaker effect. The CH₂ protons in the amino group of I (R = H; n = 1-3) are magnetically equivalent; those in I (R = H; n = 0) and the analogous cinnamic acid derivs. are not. The hydrolysis of C-Cl in I appears to be 1st order; that of I (R = Me) is an order of magnitude faster than that of I (R = H).

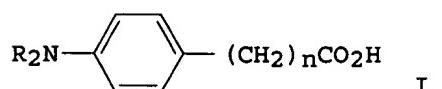
IT 5379-46-4
RL: PRP (Properties)
(NMR of)

RN 5379-46-4 CAPLUS

CN Benzoic acid, 4-[bis(2-chloropropyl)amino]- (9CI) (CA INDEX NAME)



L3 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:58444 CAPLUS
DOCUMENT NUMBER: 88:58444
TITLE: Physicochemical properties and antileukemia activity of some p-[bis(2-chloropropyl)amino]- and p-[bis(2-chloroethyl)amino]phenylalkanoic acid derivatives
AUTHOR(S): Karpavicius, K.; Prasmickiene, G.; Juodvirsis, A.; Ivanova, L. E.; Khomchenovskii, E. I.
CORPORATE SOURCE: Inst. Biokhim., Vilnius, USSR
SOURCE: Poiski Izuch. Protivoopukholevykh, Protivovospalitel'nykh Mutagennykh Veshchestv (1977), 66-75. Editor(s): Kanopkaite, S. Akad. Nauk Lit. SSR, Inst. Biokhim.: Vilnius, USSR.
DOCUMENT TYPE: Conference
LANGUAGE: Russian
GI



AB The rate of hydrolysis, pKa, PMR spectra, LD50, and antileukemic effects

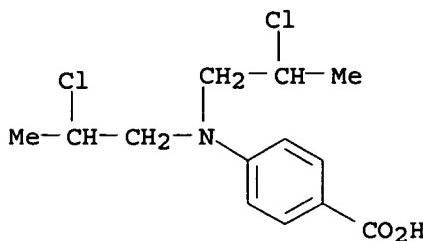
of 8 p-[bis(2-chloroalkyl)amino]phenylalkanoic acids (I) were presented. The 2-chloropropyl derivs. had a greater reactive capacity than did the 2-chloroethyl derivs. owing to the presence of the electron-donor Me group. The 2-chloropropyl derivs. were also generally more toxic than the 2-chloroethyl groups. The 2-chloropropyl derivs. were effective against granulocytopoiesis and on transplanted leukemias Nk/Ly and L-1210 in mice, whereas the 2-chloroethyl derivs. were effective against lymphopoiesis and development of Shchvetz leukemia in rats.

IT 5379-46-4

RL: BIOL (Biological study)
(antileukemic activity and physicochem. properties of)

RN 5379-46-4 CAPLUS

CN Benzoic acid, 4-[bis(2-chloropropyl)amino]- (9CI) (CA INDEX NAME)



L3 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1978:15944 CAPLUS

DOCUMENT NUMBER: 88:15944

TITLE: Comparative study of the general toxicity and antileukemic activity of new phenylalkanoic acid derivatives under experimental conditions

AUTHOR(S): Ivanova, L. E.; Zaretskii, I. I.; Khomchenovskii, E. I.; Karpavicius, K.; Prasmickiens, G.

CORPORATE SOURCE: Moscow, USSR

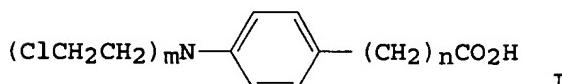
SOURCE: Leikozologiya (1975), 4, 23-9

DOCUMENT TYPE: CODEN: LEIKDK

LANGUAGE: Journal

GI Russian

©



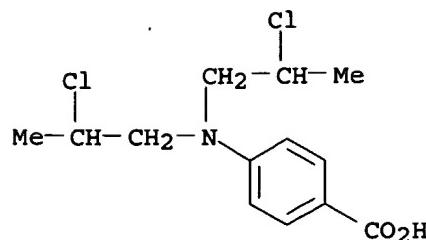
AB The toxicity and antileukemic effects of 8 phenylalkanoic acids (I) were determined. The 2-chloropropyl derivs., p-di(2-chloropropyl)aminobenzoic acid [5379-46-4], p-di(2-dichloropropyl)aminophenylacetic acid [19521-09-6], p-di-(2-chloropropyl)aminophenylpropionic acid [22812-54-0], and p-di(2-chloropropyl)aminophenylbutyric acid [55774-31-7] had greater antileukemic effects than the resp. 2-chloroethyl derivs. although LD₅₀ values tended to be lower.

IT 5379-46-4

RL: BIOL (Biological study)
(leukemia inhibition by)

RN 5379-46-4 CAPLUS

CN Benzoic acid, 4-[bis(2-chloropropyl)amino]- (9CI) (CA INDEX NAME)



L3 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1969:430178 CAPLUS

DOCUMENT NUMBER: 71:30178

TITLE: Synthesis and study of the reactivity of
p-[bis(2-chloropropyl)amino]phenylalkanoic acids

AUTHOR(S): Prasmickiene, G.; Sukeliene, D.; Karpavicius, K.;
Kil'disheva, O. V.

CORPORATE SOURCE: Nauch.-Issled. Inst. Onkol., Vilnius, USSR

SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya
(1969), (3), 643-6

CODEN: IASKA6; ISSN: 0002-3353

DOCUMENT TYPE: Journal

LANGUAGE: Russian

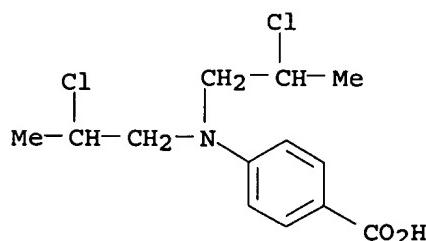
AB To 2.2 ml. POCl₃ in Me₂NCHO was added 5.72 g. p-(ClCHMeCH₂)₂NC₆H₄NH₂ in the same solvent and the mixture kept 1 day at 40° to give p-(ClCH₂-MeCH₂)₂NC₆H₄CHO, (I), m. 104-6°. I with N₂H₄ gave the appropriate ylidenehydrazone, m. 167-9°, while HONH₂ gave the oxime, m. 125-7°, which after 3 hrs. reflux in Ac₂O gave 71% p-(ClCHMeCH₂)₂NC₆H₄CN, m. 128-30°, which heated in concentrated H₂SO₄ 2 hrs. at 50° gave the corresponding amide, m. 138-40°. Oxidation of the aldehyde or heating the benzamide with HCl gave p-(ClCHMeCH₂)₂NC₆H₄CO₂H, m. 160-2°. Propylene oxide added to p-H₂NC₆H₄CH₂CH₂CONH₂ in 30% AcOH gave, in 1 day, 77% (HOCHMeCH₂)₂NC₆H₄CH₂CH₂CONH₂, m. 102-4°, which, heated with POCl₃ 1 hr., gave, on quenching in ice, 73% p-(ClCHMeCH₂)₂NC₆H₄CH₂CH₂CN (II), m. 66-8°, which in concentrated H₂SO₄ 2 hrs. at 50° gave the corresponding amide, m. 58-60°. I heated with malonic acid in pyridine-piperidine 3 hrs. gave 76% p-(ClCHMeCH₂)₂NC₆H₄CH₂CH₂CO₂H (III), m. 131-3°. II heated with concentrated HCl gave 59% corresponding free acid, m. 69-71°, also formed by hydrogenation of III over PdCaCO₃.

IT 5379-46-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 5379-46-4 CAPLUS

CN Benzoic acid, 4-[bis(2-chloropropyl)amino]- (9CI) (CA INDEX NAME)



L3 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1966:84288 CAPLUS

DOCUMENT NUMBER: 64:84288

ORIGINAL REFERENCE NO.: 64:15785d-g

TITLE: Tumor chemotherapy. XXX. Studies on the hexamethylenetetramine salt of p-bis(2-chloroethyl)amino-ω-bromoacetophenone

AUTHOR(S): Jen, Yun-Feng; Kao, I-Sheng

CORPORATE SOURCE: Inst. Mater. Med., Acad. Sinica, Shanghai, Peop. Rep.

China

SOURCE: Huaxue Xuebao (1965), 31(6), 486-92,500

CODEN: HHPA4; ISSN: 0567-7351

DOCUMENT TYPE: Journal

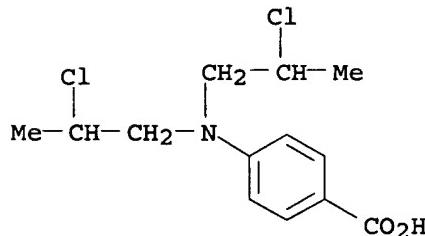
LANGUAGE: Chinese

AB cf. CA 63, 17000b. p-(XRCHCH₂)₂NC₆H₄COCH₂[(CH₂)₆N₄]⁺Br- (Ia) (X = Br, R = H) (I), (X = I, R = H) (II), p-EtO₂CNHC₆H₄COCH₂[(CH₂)₆N₄]⁺Br- (III), and p-EtO₂CNHC₆H₄COCH₂SC(:NH₂+Br-)NH₂ (IV), the analogs of the antitumor compound AT-584, were prepared. The starting materials for the synthesis of I and II were p-bis[2-haloethyl (and propyl)] aminobenzoic acids (V and VI), resp. VI was synthesized by 2 methods: (1) [R(HO)CHCH₂)₂NC₆H₄CO₂Et-p was first halogenated with PBr₃ or POCl₃ and then hydrolyzed with HCl or HBr to yield p-bis[2-chloropropyl (and 2-bromoethyl)] aminobenzoic acids. (2) Chlorination of p-bis(2-hydroxypropyl)aminobenzene with POCl₃ in dimethylformamide gave p-bis(2-chloropropyl)aminobenzaldehyde, which was treated with KMnO₄ in acetone to afford VI. The 2nd route gave a better yield. V and VI in benzene reacted sep. with SOCl₂ to give the acid chlorides, which were treated sep. with diazomethane to yield the diazoacetophenones (VII). VII were decomposed in dioxane with HBr to form bromoacetophenone derivs., which treated with hexamethylenetetramine in chloroform gave I and II, resp. p-Aminoacetophenone was treated with ethyl chloroformate in the presence of triethylamine as the condensing agent to form p-ethoxycarbonyliminoacetophenone (VIII). When N,N-diethylaniline was used as the condensing agent instead of triethylamine, the yield was better. VIII was first brominated in acetic acid with Br and then treated with hexamethylenetetramine or thiourea to afford III and IV, resp. Preliminary pharmacol. examns. showed that I and II were as active as AT-584 against HeLa cells in culture medium, while III and IV were less active.

IT 5379-46-4, Benzoic acid, p-[bis(2-chloropropyl)amino]-
(preparation of)

RN 5379-46-4 CAPLUS

CN Benzoic acid, 4-[bis(2-chloropropyl)amino]- (9CI) (CA INDEX NAME)



L3 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1951:863 CAPLUS

DOCUMENT NUMBER: 45:863

ORIGINAL REFERENCE NO.: 45:139h-i,140a-g

TITLE: Aryl-2-haloalkylamines. VII. Some derivatives of 2-naphthyldi(2-haloalkylamines)

AUTHOR(S): Davis, W.; Everett, J. L.; Ross, W. C. J.

CORPORATE SOURCE: Roy. Cancer Hosp., London

SOURCE: Journal of the Chemical Society, Abstracts (1950)

1331-7

CODEN: JCSAAZ; ISSN: 0590-9791

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 44, 6838i. This work is a continuation of that in C.A. 43, 7442g, and 44, 1431e, in which it was shown that many arylbis(2-haloalkyl)amines inhibited the growth of various animal tumors and of spontaneous and transmitted leukemia in the Furth AK 1 pure line; 2-C₁₀H₇N(CH₂CH₂Cl)₂ has been used clinically for the treatment of various lymphadenopathies in human patients with encouraging results. 1,7-AcC₁₀H₆NH₂ (16 g.), added to 11.2 g. NaOH and 18.4 g. 50% N₂H₄.H₂O in 175 g. (HOC₂H₄)₂O and heated 3 hrs. at 195°, gives 14.5 g.

1,7-EtCl₁₀H₆NH₂, brown oil (Ac derivative, m. 167°).
 1,2;3,4-Tetrahydronaphthalene (264 g.), nitrated according to Schroeter (C.A. 16, 1673), gives 60 g. 5-NO₂ and 45 g. 6-NO₂ derivs.; catalytic reduction (Raney Ni) gives 5,6,7,8-tetrahydro-1- and -2-naphthylamines. 1-Keto-1,2,3,4-tetrahydronaphthalene oxime, reduced with Na in EtOH, gives 1,2,3,4-tetrahydro-1-naphthylamine, b10 114°. These amines were converted into the N,N-bis(2-hydroxyethyl) derivs. in the usual manner but it is preferable to use SOCl₂ in CHCl₃ for the chlorination stage, N,N-Bis(2-chloroethyl)-2-methyl-1-naphthylamine, oil.
 1,2,3,4-Tetrahydro-N,N-bis(2-hydroxyethyl)-1-naphthylamine, m. 89° (picrate, m. 140°); N,N-bis-(2-chloroethyl)-1,2,3,4-tetrahydro-1-naphthylamine-HCl, m. 158°. 5,6,7,8-Tetrahydro-N,N-bis(2-hydroxyethyl)-1-naphthylamine picrate, m. 199° (decomposition); N,N-bis(2-chloroethyl)-5,6,7,8-tetrahydro-1-naphthylamine, an oil (picrate, m. 121°). N-(2-Naphthyl)-N-methyl-2-hydroxyethylamine picrate, m. 160°; N-(2-naphthyl)-N-methyl-2-chloroethylamine, m. 52.5° (inactive); N-(2-naphthyl)-N-methyl-2-hydroxypropylamine picrate, m. 154°; N-(2-naphthyl)-N-methyl-2-chloropropylamine, m. 64° (inactive). N,N-bis(2-hydroxyethyl)-6-methyl-2-naphthylamine, m. 94°; N,N-bis(2-chloroethyl)-6-methyl-2-naphthylamine, m. 65°; bis(2-bromoethyl) analog, m. 88°; bis(2-iodoethyl) analog, m. 100-1°. N,N-Bis(2-chloroethyl)-8-methyl-2-naphthylamine, m. 63°; 8-Et homolog, m. 48°; bis(2-bromoethyl)-8-ethyl analog, m. 57°; bis(2-iodoethyl) analog, m. 85°. 8-Acetyl-N,N-bis(2-hydroxyethyl)-2-naphthylamine, yellow, m. 113°; bis(2-chloroethyl) analog, yellow, m. 84°; bis(2-bromoethyl) analog, yellow, m. 94.5° (solns. of the last 2 compds. exhibit an intense yellow-green fluorescence).
 N-(2-Chloroethyl)-1,2,3,4-tetrahydro-2-naphthylamine-HCl, m. 215°; picrate, m. 197°. N,N-Bis(2-chloroethyl)-1,2,3,4-tetrahydro-2-naphthylamine-HCl, m. 164°; bis(2-bromoethyl) analog-HBr, m. 229°. 5,6,7,8-Tetrahydro-N,N-bis(2-hydroxyethyl)-2-naphthylamine, m. 57°; bis(2-chloroethyl) analog, m. 65°, photoluminescent.
 N,N-Bis(2-hydroxyethyl)-2-phenanthrylamine, m. 155°; bis-(2-chloroethyl) analog, m. 91-2°; bis(2-bromoethyl) analog, m. 111-12°; bis(2-iodoethyl) analog, m. 117°.
 N,N-Bis(2-hydroxyethyl)-3-phenanthrylamine, m. 109-10°; bis(2-chloroethyl) analog, m. 73°; bis(2-bromoethyl) analog, m. 98°; bis(2-iodoethyl) analog, m. 125°. 2-(2-Hydroxyethylamino)fluorene, yellow, m. 150° (cf. C.A. 43, 7442g); 2-chloroethyl analog, m. 127°. 2-[Bis(2-bromoethyl)amino]fluorene m. 137°. N'-Propionyl-N,N-bis(2-chloroethyl)-p-phenylenediamine m. 101-3°. p-[Bis(2-chloropropyl)amino]benzoic acid, m. 165-6°; Me ester, m. 61°. p-MeOC₆H₄N(CH₂CH₂Cl)₂ (2.5 g.) and 3.4 g. Et₂NCS₂Na in 200 ml. 50% aqueous Me₂CO, refluxed 2 hrs., give N,N-bis[2-(diethyldithiocarbamyl)ethyl]-p-anisidine, m. 85-6°. p-MeOC₆H₄[NCH₂CH(OH)CH₂Cl]₂ (40 g.) in 500 ml. boiling ether, gradually treated with 40 g. KOH, gives N,N-bis(2,3-epoxypropyl)-p-anisidine, yellow, b9 228-9°; this is inactive. Data are given for the rate of hydrolysis of a number of these compds. in 50% aqueous Me₂CO at 66°. The effect of various substituents is discussed. There is the expected increase in the rate of hydrolysis on passing from the Cl to Br compound but a somewhat surprising decrease for the iodides.

IT

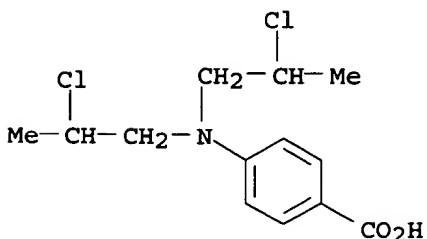
5379-46-4, Benzoic acid, p-[bis(2-chloropropyl)amino]-
(preparation of)

RN

5379-46-4 CAPLUS

CN

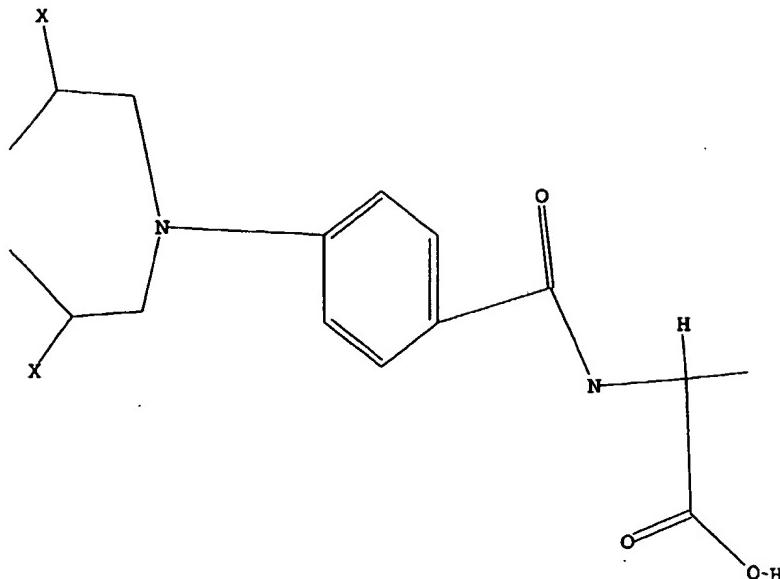
Benzoic acid, 4-[bis(2-chloropropyl)amino]- (9CI) (CA INDEX NAME)



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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 10:55:44 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
PROJECTED ITERATIONS: 2 TO 124
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

L3 0 L2

=> s l1 full
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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FULL SCREEN SEARCH COMPLETED - 40 TO ITERATE

100.0% PROCESSED 40 ITERATIONS
SEARCH TIME: 00.00.02

1 ANSWERS

L4 1 SEA SSS FUL L1

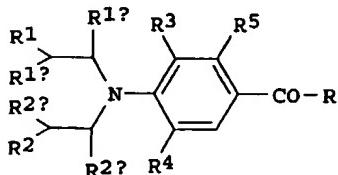
L5 1 L4

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L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:707131 CAPLUS
DOCUMENT NUMBER: 133:267154
TITLE: Preparation of nitrogen mustard compounds and prodrugs
INVENTOR(S): Springer, Caroline Joy; Davies, Lawrence Christopher
PATENT ASSIGNEE(S): Cancer Research Campaign Technology Limited, UK
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000058271	A1	20001005	WO 2000-GB1194	20000329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NZ 513759	A	20010928	NZ 2000-513759	20000329
EP 1165493	A1	20020102	EP 2000-918981	20000329
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002540186	T2	20021126	JP 2000-607975	20000329
PRIORITY APPLN. INFO.:			GB 1999-7414	A 19990331
			WO 2000-GB1194	W 20000329

OTHER SOURCE(S): MARPAT 133:267154
GI



I

AB Nitrogen mustard compds. and prodrugs I [R = OH or NHCH(Z)CO2R7, resp.,
where R1, R2 = Cl, Br, I, OSO2Me, or OSO2Ph; R1a, R2a, R1b, R2b = H,

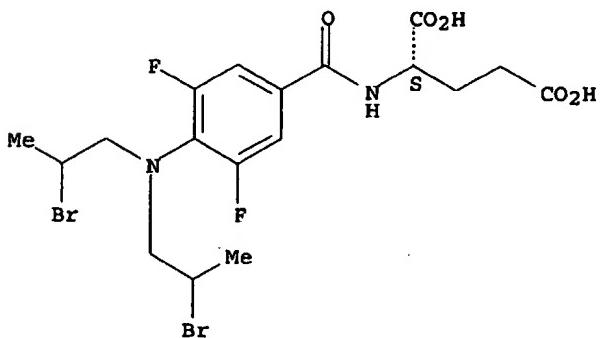
C1-4-alkyl or -haloalkyl; R3 = F, Cl, Br, I, OCHF₂, C.tplbond.CH, OCF₃, Me, CF₃, SF₅, SCF₃, or CF₂CF₃; R4 = H, any group given for R3; R5 = H, F; R7 = H, Me₃C, allyl; Z = (un)substituted -CH₂-T-W, where T = CH₂, O, S, S(O), or SO₂; W = CO₂H, CONH₂, SO₂NH₂, SO₃H, PO₃H₂, tetrazol-5-yl, heterocyclylthio, etc. (with provisos)] were prepd. for use in therapy and treatment, for example, of cancer. Thus, [3,5-difluoro-4-[bis(2-iodoethyl)amino]benzoyl]-L-glutamic acid, prepd. via amidation of 3,5-difluoro-4-[bis(2-iodoethyl)amino]benzoic acid with di-tert-butyl-L-glutamate hydrochloride, showed antitumor activity against breast carcinoma in mice at 0.98 mM vs. 2.9 mM for the prior art compd. [3-fluoro-4-[bis(2-chloroethyl)amino]benzoyl]-L-glutamic acid.

IT 298211-06-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of nitrogen mustard compds. and prodrugs)

RN 298211-06-0 CAPLUS

CN L-Glutamic acid, N-[4-[bis(2-bromopropyl)amino]-3,5-difluorobenzoyl]-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Figure 1A

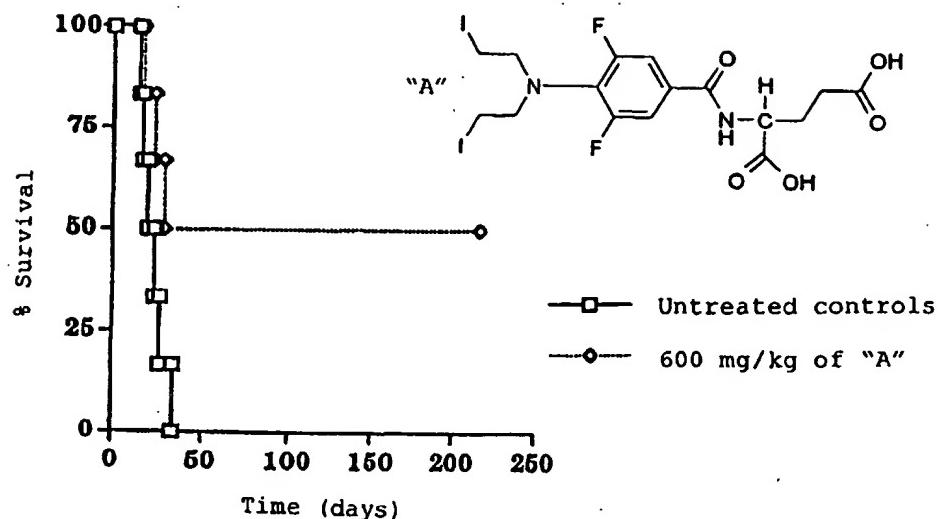


Figure 1B

